

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored in separate physical domains of the data area from one another; and

a navigation area storing navigation information, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

2. (Canceled)

3. (Currently Amended) The recording medium of claim [[2]] 1, wherein the navigation area includes a navigation data item, the navigation data item providing navigation information for reproducing each of the multiple reproduction paths.

4. (Original) The recording medium of claim 3, wherein the navigation area includes a navigation list, the navigation list including at least the navigation data item.

5. (Original) The recording medium of claim 4, wherein the navigation data item includes a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

6. (Original) The recording medium of claim 3, wherein the navigation data item includes a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

7. (Original) The recording medium of claim 1, wherein each reproduction path represents a digital channel.

8. (Original) The recording medium of claim 1, wherein each reproduction path represents a sub-channel of an RF channel.

9. (Original) A recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a navigation area storing a navigation data item, the navigation data item providing navigation information for reproducing each of the multiple reproduction paths and providing a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

10. (Original) The recording medium of claim 9, wherein the navigation area includes a navigation list, the navigation list including at least the navigation data item.

11. (Original) The recording medium of claim 9, wherein each reproduction path represents a digital channel.

12. (Original) The recording medium of claim 9, wherein each reproduction path represents a sub-channel of an RF channel.

13. (Currently Amended) A method of recording a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and

the transport packets of each reproduction path being stored in separate physical domains of the data area from one another; and

recording navigation information on the recording medium, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

14. (Currently Amended) A method of reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

reproducing a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored in separate physical domains of the data area from one another; and

reproducing at least a portion of navigation information from the recording medium, a navigation area storing navigation information, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

15. (Currently Amended) An apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical recording device to record data on the recording medium;

a controller for controlling the driver to record a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored in separate physical domains of the data area from one another, and the controller controlling the driver to record navigation information on the recording medium, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

16. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical reproducing device to reproduce data recorded on the recording medium;

a controller for controlling the driver to reproduce a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with

one of the multiple reproduction paths, and the transport packets of each reproduction path being stored in separate physical domains of the data area from one another, and the controller controlling the driver to reproduce at least a portion of navigation information from the recording medium, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

17. (New) A recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another, and

a navigation area storing a first type of navigation unit, the first type of navigation unit including one or more navigation units of a second type and controlling a reproduction order of the second type of navigation units, each second type of navigation unit referencing one or more navigation units of a third type, each third type of navigation unit indicating a separate file of video data in the data area to reproduce.

18. (New) The recording medium of claim 17, wherein the third type of navigation units in at least one of the second type of navigation units are each associated with a different one of the multiple reproduction paths.

19. (New) The recording medium of claim 18, wherein a number of the third type of navigation units in the at least one of the second type of navigation units is equal to a number of the multiple reproduction paths.

20. (New) The recording medium of claim 18, wherein the third type of navigation units in the at least one of the second type of navigation units each include a map providing position data for the video data of the associated one of the multiple reproduction paths.